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TRANSMITTAL LETTER (General - Patent Pending)

Docket No. 115426-949

In Re Application Of: David Kloper

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/016,845	December 14, 2001	S. Hom	29158	2666	7445

Title:

INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Statement with Petition for Revival (2 pages); Copy of Previously Submitted Postcard; Copy of Cancelled Check; Copy of Previously Submitted Petition for Revival (2 pages); Copy of Previously Submitted Amendment (9 pages); and Return Receipt Postcard.

in the above identified application.

Ø	No additional fee is required.	
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Dated: July \$, 2006

Mark D. Pratt Reg. No. 45,794 Customer No. 29158

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on July 7, 2006

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Heather Foster

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

David Kloper

Appl. No.:

10/016,845

Conf. No.:

7445

Filed:

December 14, 2001

Title:

INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM

Art Unit:

2666

Examiner:

Hom, Shick C.

Docket No.:

PD-200372 (115426-949)

Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

STATEMENT WITH PETITION FOR REVIVAL

The Applicant respectfully requests prompt consideration of the previously filed Petition For Revival and 1.116 Amendment for the above-identified application. As indicated by the attached stamped postcard and processed check of 1,500, a Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 C.F.R. §1.137(b) and Amendment Pursuant To 37 C.F.R. §1.116 were filed on June 2, 2006. The Petition For Revival was filed to revive the application, which was abandoned unintentionally due to a docketing error. The Amendment was filed to *prima facie* place the application in condition for allowance.

The Applicant's representative recently contacted the Office of Petitions regarding the status of the application and was told that the Office of Petitions had no record of the above filing. Accordingly, the Applicant herein attaches copies of the Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 C.F.R. §1.137(b), the Amendment Pursuant To 37 C.F.R. §1.116, the stamped postcard and the processed check of 1,500.00, as evidence of the original filing on June 2, 2006.

In light of the above, the Applicant respectfully requests that the previously submitted Petition For Revival and Amendment be considered, and a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Director is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction

is made, please indicate the attorney docket no. PD-200372 (0115426-949) on the account statement.

Respectfully submitted,

Mark D. Pratt Reg. No. 45,794 Customer No.: 29158

202-955-7003

Dated:



In re Patent Application of: David Kloper

INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM

Docket No. PD-200372 (115426-949)

On the date stamped hereon the U. S. Patent & Trademark Office hereby acknowledges receipt of the following:

1. Petition For Revival Of An Application For Patent Abandoned Unintentionally Under 37 CFR 1.137(b)

- 2. Amendment Pursuant To 37 CFR 1.116
- 3. Check in the amount of \$1,500.00

Mailed First Class by MDP on June 2, 2006



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Approved for use through 07/31/2008, OMB 0851-0031

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PETITION FOR REVIVAL OF AN APPLICATION FOR PATE UNINTENTIONALLY UNDER 37 CFR 1.137(b)	NT ABANDONED	Docket Number (Optional) PD-200372 (115426-949)
First named inventor: David Kloper		
Application No.: 10/016,845	Art Unit: 2666	
Filed: December 14, 2001	Examiner: Hom, S	hick C.
The: Inroute training in a two-way satellite syst	EM	
Attention: Office of Petitions Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 FAX: (571) 273-8300		
NOTE: If information or assistance is needed in complete information at (571) 272-3282.	ing this form, please con	tact Petitions
The above-identified application became abandoned for failure to by the United States Patent and Trademark Office. The date of at the period set for reply in the office notice or action plus any extension	bandonment is the day a	fter the expiration date of
APPLICANT HEREBY PETITIONS FOR REVIVA	AL OF THIS APPLICATION	N
NOTE: A grantable petition requires the following items: (1) Petition fee; (2) Reply and/or issue fee; (3) Terminal disclaimer with disclaimer feereq filed before June 8, 1995; and for all design (4) Statement that the entire delay was unintent	applications; and	ant applications
1. Petition fee Small entity-fee \$ (37 CFR 1.17(m)). Applicant cla	•	See 37 CFR 1.27.
Other than small entity - fee \$ 1,500 (37 CFR 1.17(m))))	
A. The reply and/or fee to the above-noted Office action in the form of has been filed previously on is enclosed herewith.		fy type of reply):
B. The issue fee and publication fee (if applicable) of \$ has been paid previously on is enclosed herewith.	•	.

[Page 1 of 2]

[Fage 1 or 2]

This collection of Information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending on the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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3. Termina	i disci	almer with disclaimer fee		
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		Mark D. Pratt	_	45,794
		Typed or printed name		Registration Number, if applicable
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

David Kloper

Appl. No.:

10/016,845

Conf. No.:

7445

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Title:

INROUTE TRAINING IN A TWO-WAY SATELLITE SYSTEM

Art Unit:

2666

Examiner:

Hom, Shick C.

Docket No.: PD-200372 (115426-949)

Mail Stop Amendment Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

AMENDMENT PURSUANT TO 37 C.F.R. §1.116

In reply to the final Office Action dated November 29, 2005, please amend the claims as follows:

The Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

The Remarks begin on page 8 of this paper.

This paper is being filed along with a Petition to Revive.

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A method for ranging in a radio frequency communications system, the method comprising:

selecting a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme;

transmitting a ranging message according to the selected transmission channel class over a channel; and

selectively modifying the transmission channel class based upon characteristics of the channel; and

receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 2 (previously presented): The method according to claim 1, further comprising:

storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message.

Claim 3 (previously presented): The method according to claim 1, wherein the transmitting step and the modifying step are iteratively performed to achieve an improved transmission class.

Claim 4 (previously presented): The method according to claim 1, wherein the modifying step is performed periodically in response to a change in the characteristics of the channel.

Claims 5-6 (canceled)

Claim 7 (previously presented): The method according to claim 1, further comprising:

altering the transmission channel class for load balancing.

Claim 8 (currently amended): A terminal apparatus for supporting ranging over a radio frequency communications system, the apparatus comprising:

a transmit unit that is configured to transmit a ranging message according to a selected transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme over a channel; and

means for selectively modifying the transmission channel class based upon characteristics of the channel; and

a receive unit configured to receive request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite that supports bidirectional communication.

Claim 9 (previously presented): The apparatus according to claim 8, further comprising:

memory configured to store parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message.

Claim 10 (previously presented): The apparatus according to claim 8, wherein the transmission rate is increased to a value that is sustainable by the channel.

Claim 11 (previously presented): The apparatus according to claim 8, wherein the transmission rate is periodically modified in response to a change in the characteristics of the channel.

Claims 12-13 (canceled)

Claim 14 (previously presented): The apparatus according to claim 8, wherein the transmission channel class is altered for load balancing.

Claim 15 (currently amended) A computer-readable medium carrying one or more sequences of one or more instructions for ranging in a radio frequency communications system,

the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

selecting a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme;

initiating transmission of a ranging message according to the selected transmission channel class over a channel; and

selectively modifying the transmission channel class based upon characteristics of the channel; and

receiving a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 16 (previously presented): A computer-readable medium according to claim 15, wherein the one or more processors further perform the step of:

storing parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the message.

Claim 17 (previously presented): The computer-readable medium according to claim 15, wherein the transmitting step and the modifying step are iteratively performed to achieve an improved transmission class.

Claim 18 (previously presented): The computer-readable medium according to claim 15, wherein the modifying step is performed periodically in response to a change in the characteristics of the channel.

Claims 19-20 (canceled)

Claim 21 (previously presented): The computer-readable medium according to claim 15, wherein the one or more processors further perform the step of:

altering the transmission channel class for load balancing.

Claim 22 (currently amended): A method for ranging in a radio frequency communications system, the method comprising:

receiving a ranging message from a terminal over a channel associated with a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme;

performing ranging measurements corresponding to the message; and outputting a ranging response message based upon the ranging measurements, the ranging response being transmitted to the terminal, the terminal selectively modifying the transmission channel class based upon the ranging response; and

transmitting a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 23 (previously presented): The method according to claim 22, wherein the terminal stores parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the transmission of the ranging message.

Claim 24 (previously presented): The method according to claim 22, wherein the transmission rate is increased to a value that is sustainable by the channel.

Claim 25 (previously presented): The method according to claim 22, wherein the transmission rate is periodically modified by the terminal in response to a change in the characteristics of the channel.

Claims 26-27 (canceled)

Claim 28 (previously presented): The method according to claim 22, further comprising:

altering the transmission channel class for load balancing.

Claim 29 (currently amended): A computer-readable medium carrying one or more sequences of one or more instructions for ranging in a radio frequency communications system, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

performing ranging measurements corresponding to a ranging message received from a terminal over a channel associated with a transmission channel class that includes at least one of transmission rate, modulation scheme, and coding scheme; and

outputting a ranging response message based upon the ranging measurements, the ranging response being transmitted to the terminal, the terminal selectively modifying the transmission channel class based upon the ranging response; and

transmitting a request to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, wherein the radio frequency communications system includes a satellite configured to support two-way communication.

Claim 30 (previously presented): The computer-readable medium according to claim 29, wherein the terminal stores parameters associated with the transmission of the message over the channel, the parameters including at least one of power information and timing information associated with the ranging transmission of the message.

Claim 31 (previously presented): The computer-readable medium according to claim 29, wherein the transmission rate is increased to a value that is sustainable by the channel.

Claim 32 (previously presented): The computer-readable medium according to claim 29, wherein the transmission rate is periodically modified by the terminal in response to a change in the characteristics of the channel.

Claims 33-34 (canceled)

Claim 35 (previously presented): The computer-readable medium according to claim 29, wherein the one or more processors further perform the step of: altering the transmission channel class for load balancing.

Claim 36 (currently amended): A satellite communications system comprising:

a terminal configured to perform ranging to determine a target transmission rate among a plurality of transmission rates by transmitting a ranging message over a satellite; and

a hub configured to receive the ranging message and to perform ranging measurements corresponding to the message, the hub outputting a ranging response message that includes ranging parameters, the ranging response being transmitted to the terminal, and the terminal adapts the target transmission rate based upon the ranging response, wherein the hub instructs the terminal to perform re-ranging based upon re-ranging criteria that includes at least one of location of the satellite, and the characteristics of the channel, and the satellite supports bidirectional communications.

Claim 37 (previously presented): The system according to claim 36, wherein the terminal includes memory configured to store the ranging parameters, the parameters including at least one of power information and timing information associated with the transmission of the ranging message.

Claim 38 (previously presented): The system according to claim 36, wherein the terminal iteratively transmits the ranging message to determine a maximal transmission rate for the target transmission rate.

Claim 39 (previously presented): The system according to claim 36, wherein the transmission rate is periodically modified in response to a change in the characteristics of the channel.

Claims 40-41 (canceled)

Claim 42 (previously presented): The system according to claim 36, wherein the hub instructs the terminal to modify the target transmission rate to perform load balancing.

on:

REMARKS

This Amendment is submitted in reply to the final Office Action mailed on November 29, 2005, issued in connection with the above-identified application. Claims 1-42 are pending in this application. Independent claims 1, 8, 15, 22, 29 and 36 have been amended, and dependent claims 5-6, 12-13, 19-20, 26-27, 33-34 and 40-41 have been canceled. No new matter has been added as a result of the changes made to the application, thus, reconsideration is respectfully requested. This Amendment is filed along with a Petition to Revive and the changes proposed herein *prima facte* place the application in condition for allowance.

I. Examiner Interview

An interview was conducted with Examiner Hom on June 1, 2006, regarding amendments to the claims, which would place the application in condition for allowance. It was agreed that the application would be allowable if independent claims 1, 8, 15, 22, 29 and 36 were amended to include the allowable subject matter of dependent claims 6, 13, 20, 27, 34 and 41.

II. Allowable Subject Matter

The Examiner deemed claims 6, 13, 20, 27, 34 and 41 allowable if rewritten in independent form to include all the limitations of their base claims and any intervening claims. Accordingly, the Applicant has herein amended the claims as suggested by the Examiner. In particular, independent claim 1 has been rewritten to include the combination of claims 1/5/6; independent claim 8 has been rewritten to include the combination of claims 8/12/13; independent claim 15 has been rewritten to include the combination of claims 15/19/20; independent claim 22 has been rewritten to include the combination of claims 22/26/27; independent claim 29 has been rewritten to include the claims combination of claims 29/33/34; and claim 36 has been rewritten to include the claim combination of claims 36/40/41.

III. Response To Claim Rejections

Claims 1, 3-4, 8, 11, 15, 17-18, 22, 25, 29, 32, 36 and 38-39 stand rejected under 35 U.S.C. §102(e) as being anticipated by Prismantas et al. (U.S. Patent Application No. 2002/0155811, hereafter "Prismantas"). Claims 5, 10, 12, 19, 24, 26, 31, 33 and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Prismantas in view of Enns et al. (U.S. Patent Application No. 2003/0161263, hereafter "Enns"). Claims 2, 7, 9, 14, 16, 21, 23,

28, 30, 35, 37 and 42 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Prismantas in view of Parmenter (U.S. Patent No. 6,615,052, hereafter "Parmenter").

As noted above, independent claims 1, 8, 15, 22, 29 and 36 have been amended to include the allowable subject matter of dependent claims 6, 13, 20, 27, 34 and 41. As amended, independent claims 1, 8, 15, 22, 29 and 36 are now clearly distinguishable over the cited prior. Additionally, dependent claims 1-4, 7, 9-11, 14, 16-18, 21, 23-25, 28, 30-32, 35, 37-39 and 42 are clearly distinguishable over the cited prior art based on their dependency from independent claims 1, 8, 15, 22, 29 and 36.

IV. Conclusion

In light of the above, the Applicant respectfully submits that all the pending claims are both novel and non-obvious over the prior art of record. The Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Director is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket no. PD-200372 (0115426-949) on the account statement.

Respectfully submitted,

RY

Mark D. Pratt Reg. No. 45,794

Reg. No. 45,794 Customer No.: 29158

Dated: